Some Farther

CONSIDERATIONS

Concerning

ALKALY and ACID,

By Way of

APPENDIX

To a late

ESSAY.

WHEREIN

The *Terms* are made Clear, and the *Natures* of them Both more fully Explained: Together with an *Answer* to the *Objections* that have been raised against some Things contained in the said *Essay*.

By John Colbatch, *Physician.*

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TO THE

Learned and Ingenious

Dr. *Edward Baynard*,

Fellow of the College of Physicians, *London*.

Honoured Sir,

THE Civil and Gentleman-like Treatment I met with the first time I saw you, and the many Favours I have received from you since I have been honoured with your more Intimate Acquaintance, emboldens me to prostrate this Trifle at your

Feet; not pretending thereby to merit any thing from you, but as a juſt Acknowledgment of the many Obligations I lye under. It would be a Wrong to you for me to ſpeak any thing in your Praiſe, your Merits being better known, than I am able to repreſent them. It was you, SIR, who were (for ought I know) the moſt early Cultivator of the Doctrine of *Acids* in the Cure of Diſeaſes, in this Nation; and the Succeſs you have had in your Practice ſufficiently makes it appear, that you very well underſtood what you went about, when you durſt contend with the whole World, by treading in a New Path to Aid and Succor Life, which few Phyſicians ever went before. *Macte!* SIR, in ſo Great a Work as in Saving from the Grave; ſo ſhall the Name of *Baynard* not be known to the Widow, nor the Cries of the Fatherleſs entail Vengeance on your Houſe. And would your Multiplicity of

Buſi-

Buſineſs but permit you to collect your own Obſervations, and make them Publick, I am ſure the Mouths of all your Oppoſers would be for ever ſtopp'd, and their Errors cured by your Healing Hand; for I know your Charity extends to Lunacy, as well as other Diſeaſes: For none but the Moon-ſick can doubt ſo known and clear a Truth, as are the daily and moſt apparent Cures done by (the Happy Diſcovery of) the Uſe of *Acids*. 'Tis well known, SIR, that Nature and Art has ſufficiently arm'd you for any Enemy, if ſuch there are; tho your Condonable Diſpoſition is like the Sun, which ſhines even upon the Curs that bark at him. Your Pardon, SIR, for this Trouble, and I doubt not but from you to meet with a Generous Acceptance and Protection; and if Dr. *Baynard* eſpouſe my Cauſe, I care not who is againſt me. I aſſure you I bring no common Inclinations to ſerve you; neither would I by

ordinary Testimonies expres that Passion wherewith I am,

SIR,

Your most Humble and most Devoted Servant,

JOHN COLBATCH.

THE

THE

Preface.

I Have ſo enquired into the Cauſes of Diſeaſes, as to be altogether certain of the truth of the Hypotheſis *I have already advanced, and am now, in ſome meaſure, endeavouring to confirm: But I don't at all pretend to have arrived to ſo much Certainty as that by the Methods I take, to make People Immortal, and that no Perſon ſhall die with whom I am concerned, which is what I believe ſome People have expected from me. But, for my Part, I ſhall always entirely ſubmit to, and have reſpects for the Providence of the Almighty, who alone is the Author and Diſpoſer*

of our Lives; and who by the mouth of an Inſpired Writer, has declared, That our days are determined; and beyond the Limitation, ſet by that wiſe Author of Nature, we cannot paſs; it being altogether impoſſible for Creatures to contend with their Creator, or to extend the Time that he hath limited.

Phyſicians are, of all men, without doubt, the moſt unhappy; People, in their Extremities, looking upon them as their Saviours and Deliverers; yet after all, they having done as much as 'twas in the power of man to do, having in all reſpects acquitted themſelves with the utmoſt fidelity and diligence, if their Patients die, their appointed time being come, and the number of their days, alotted them by the Almighty, being expired; yet the Friends and Relations of the Party deceaſed, ſeldom fail to charge them in one reſpect or other, though inſtead of being blamed, the Phyſician has deſerved

deſerved their utmoſt Favour and Eſteem.

By what I have ſaid, I would not be ſo underſtood, That I am ſo far a Predeſtinarian, *as to believe that Peoples Lives are not frequently prolonged by the uſe of fit and proper Medicines: For if it were not ſo, why ſhould the wiſe Creator have been at ſo much trouble, in providing ſuch a vaſt number of Medicines, in the Animal, Vegetable, and Mineral Kingdoms? if he did not by them deſign a real ſervice to Mankind in diſtreſs.*

God generally gives a Bleſſing to proper means, it not being uſual for him to work Miracles every day. He teaches the Plowman how to plow his Ground, and the Seedſman to ſowe his Seed; but the Plowman, inſtead of a Plow, muſt not uſe a Harrow; neither muſt the Seedſman expect to reap Wheat, if he ſowes Barley: So it is in the practice of Phyſick, he that expects ſucceſs in his Practice, muſt firſt

endeavour

endeavour rightly to know the Causes of Diseases, and then to use fit Remedies, and after that, the Event must be left to the Blessing of the Almighty.

The Plowman may plow his ground aright, and the Seedsman sowe his Seed in due season, and after all is done they may reap no Crop: so the Physician may have an exact knowledge of the Causes of Diseases, and may use the most fit and proper Medicines in the World, and yet at last be frustrated in his Aim: Which ought to shew us what an exact reliance and dependance we should have upon the Blessing of God on all our Endeavours, without which, we are like to make but little progress in any thing.

I tread in an unbeaten Path, and therefore cannot so happily and easily arrive at my Journeys end, as if I had had some body or other before, to have chalked out my way for me.

I hope I shall not by these my Endeavours, incur the displeasure of any

one

one of those Physicians who are of a contrary Judgment to me, they being still left at liberty to use their own Methods and Alkalious Medicines: For tho we act upon different Principles, our Ends and Designs are the same, which are the Cure of Diseases; and if I, after a multitude of Experiments, am convinced that Acids *are not the Causes of Diseases, but, on the contrary, that* Alkalies *are, and upon that score am induced to use* Acids *in all or most Distempers; I don't see any reason why People should reproach me for it, since I have made no Personal Reflections upon any one.*

As for the Physicians of our own Nation, I have the highest Value and Esteem for them, having generally found them to be Men of greater Learning, and who understand the business of their Profession better than any of the Physicians I have at all met with abroad.

As for going again to Flanders *with the Army, I never design that any more,*

more, being ſufficiently deterred from it, by the ill Treatment I had there laſt Year, by the means of ſome of my old Friends the Surgeons. And that I may no longer continue at Variance with ſo great a Body of Men, I have ſold the Receipt of my Vulnerary Powder and Tincture, and all the ſaid Medicines I had by me, to a Gentleman who is better able to diſpoſe of them for the Publick Good of Mankind than I could; and therefore ſhall for the future wholly apply my ſelf to my Practice of Phyſick, in which if I have Succeſs (which I doubt not) I ſhall have buſineſs, maugre all my Enemies Malice.

From my Houſe in *Villars-ſtreet, York-Buildings* in the *Strand*, Mar. 25th. 1696.

Some

Some further

CONSIDERATIONS

Concerning

Alkaly and *Acid*, &c.

I Thought to have ſaid no more upon this Subject, until the Publication of my Hiſtory of Human Blood: But I finding that to be a thing of greater difficulty, and that a much greater Number of Experiments than I at firſt thought of, will be neceſſary to make that Hiſtory

compleat in all its Parts; by which means it will be something longer than I at first intended, before that Piece appears in the world: Therefore I have thought fit,

First, To explain the Terms, or what is meant by *Alkaly*, and what by *Acid*; which I find very many people, who are not Physicians, are in great measure ignorant of.

Secondly, To explain the Nature of them somewhat more fully and clearly than I have yet done.

Thirdly and *Lastly*, To answer the Objections that have been raised against some particular things contained in my Essay.

All

All which Heads I ſhall handle with as much Brevity and Perſpicuity as poſſibly I can; omitting the more full Proſecution of them, till the Publication of my Hiſtory of Human Blood, which, I hope, will be ready for the Preſs about the Month of *June*.

I ſhall make bold to declare, That I have not Publiſhed this Doctrine of *Alkaly* and *Acid*, out of any deſign of appearing ſingular, or being the Head of a Faction, but out of mere Pity and Compaſſion to Mankind, my Fellow-Creatures, whoſe deplorable Circumſtances under Miſtaken Methods, I have long bewailed; to ſee Phyſick made the Scene of

Slaughter, and ſo many miſerable Mortals (the helpleſs Sick) ſent daily to their Laſt Homes, as Victims to Error and Ignorance: Whilſt the Learned Preſcriber jogs on in his old miſtaken Alkalious Road; not dreaming (as the Wiſe-Man ſays) *that Death is there, and that his Portion* (I mean the Patient's) *is with the Worms.*

But that I may return to my Buſineſs.

Firſt, To explain the Terms, or what is meant by *Alkaly*, and what by *Acid.*

Alkaly derives its Name from the Herb *Kaly*, from the Aſhes of which Herb is extracted a large quantity of Salt, which

which by the *Venetians* and others is much uſed in the making of Soap and Glaſs; and this Salt they call *Sal Kaly*, and by leaving out the S *Alkaly*. Now the Aſhes of all or moſt Vegetables affording a Salt of the ſame nature with the Aſhes of the Herb *Kaly*, therefore all Lixivial Salts are equivocally called *Alkalies*, and all other things of the ſame nature, whether manifeſtly Saline or not, *Alkalies*; ſuch are Arſnick, and all the Teſtacea, as Pearl, Coral, Crabs-Eyes, Oyſter-Shells, *&c.*; and all Urinous Spirits and Salts, ſuch as Spirit and Salt of Blood, Urine, Harts-horn, *&c.* And ſome think, that of theſe *Alkalies*

are made the famous White Powder, ſo much talk'd of, which kills without a Bounce, and murthers without making a Noiſe.

Acid, I ſuppoſe, did firſt derive its name from *Acaid*, an *Arabian* Word for *Acetum*, Vinegar, which is the moſt common and known Acid; and therefore all things of the ſame Taſte and Nature with Vinegar, *Acids*; ſuch are the Juices of moſt Fruits and Plants in their Natural ſtate, and unfermented; though all fermented Vegetable Juices do after fermentation retain ſomething of their priſtine Acidity, though not in ſo eminent a degree: But every body knows that all fer-

fermented Juices, such as all sorts of Wine, Ale, Beer, &c. let them be preserved with never so much care, will at last return to their pristine state of Acidity. All Metaline Sulphurs are to be ranged amongst the Number of Acids, they being nothing but a Congestion of Acid Particles. I may likewise without presumption reckon all sorts of Balsoms and Pinquedinous and Oleaginous Substances, amongst the number of Acids; by reason that in the most bare and simple Distillation, they afford large quantities of Acid Substances, but nothing that is Alkalious. Bread also, that is, not without reason accounted the Staff of

Life, affords also by Distillation a large quantity of an Acid Substance, which is no despicable Menstruum. Sugar, which though in its Taste seems to be nothing less than an Acid, yet by a Philosophical Management appears to be nothing else but a Congestion of Acid Particles.

Thus for the present I think I have given a sufficient account of what I mean by *Alkaly*, and what by *Acid*; and also what things are to be accounted *Alkalies*, and what *Acids*.

There are some things which seem to be of a mixt nature between Alkaly and Acid, which things we call Neutrals.

Now

Now thoſe things of this Tribe which afford by much a greater quantity of Acid Subſtances than Alkalious ones, I ſtick not to call *Acids*, becauſe the Acid predominates; and thoſe that afford by much a greater quantity of Alkalious than Acid Subſtances, I call *Alkalies*. Though in a more ſtrict ſenſe they deſerve rather to be called either Sub-Acid Alkalies, or Sub-Alkaline Acids, according as either the one or the other predominates.

I ſhall now proceed to my *Second* thing, which is, To explain the Nature of Alkalies and Acids more fully and clearly than I have yet done.

For

For the well Performance of which Task, I ſhall compare the Operation of them both upon Human Bodies, both internally taken, and externally applied.

I ſhall begin with *Sal Kaly*, which is the Standard of Alkalies, and compare that with Vinegar the Standard of Acids.

Sal Kaly, and ſo all Lixivious, Vegetable Salts, as Salt of Wormwood, *&c.* being applied outwardly to the bare Skin, ſcorcheth and burneth the ſame, all one as if a Red Hot Iron were actually applied to it, cauſing an Eſcar, which falling off, an Ulcer follows: Nay, indeed there is ſcarce any other Cauſtick uſed, than a Li-

a Lixivium of *Sal Kaly*, which is what the Chyrurgeons call Capital or Strong Soap-Lees, evaporated to Drineſs. The ſame being taken inwardly, without being greatly diluted by ſome Aqueous Vehicle, in moſt people cauſeth enormous Vomitings, which I my ſelf have formerly experienced; and if it be never ſo much diluted, if it doth not excite Vomitings, it rarely fails of either depraving, palling, or totally deſtroying the Appetite: Beſides, being conveyed into the Blood, by breaking its Globules and ſpoiling of its Texture, it cauſeth either Scorbutes, Rheumatiſms, Sciatica's, Conſumptions, Gout, Palſies,

or

or ſome other of the fatal Tribe of Chronical Diſeaſes.

Now I have ſhewn what *Sal Kaly*, and the reſt of the Tribe of Vegetable Lixivious Salts will do; in the next place let's ſee what effects even common plain Vinegar, which is the ſtandard of Acids, will have, being externally uſed, and internally taken.

It is well known, that Vinegar being externally applied, is of extraordinary uſe in a great many ſorts of Inflamations, of ſingular uſe in an *Eriſipelas*, or St. *Anthony's* Fire. Cloaths being dipp'd in it, and applied to the Forehead and Temples, to the Wriſts, the Stomach, and bottoms of the Feet, I have experimen-

perimentally found to be of extraordinary uſe in ſome very burning Feavers: I have likewiſe my ſelf (before I had found out a more certain Remedy) ſometimes made uſe of it with good ſucceſs in great Bleedings at the Noſe, by dipping a Spunge in good ſtrong Vinegar, and applying it to the Scrotum. I have alſo known it with good ſucceſs to have been made uſe of by poor people, in ſtinking old Ulcers. From all which it appears, that being externally applied, it's no Cauſtick, and will make no Ulcer, but on the contrary, will cure Ulcers, eaſe Pain, &c.

Now

Now we have seen some of its good Effects, being externally applied; let's see what it will do being internally taken.

In the first place I shall mention an Account given of it by the Ingenious Dr. *Baynard*: He says that he was called in to a Person who had a Total Suppression of Urine, under which he had laboured some considerable time, and that several things had in vain been given him; he immediately gave him a large Draught of Vinegar, which soon made him to Piss freely; and by repeating of it two or three times, he was perfectly freed from his Indisposition. The Doctor has given an account of this in one of

of the Philoſophical Tranſactions; but I have not read it, neither have I time at preſent to look over thoſe Papers. I think alſo he has told me, that the ſame thing he has done with the ſame plain Medicine two or three times. He likewiſe gave me ſeveral Inſtances of many Perſons in moſt violent Fevers, who have been preſently cured by drinking large Draughts of *Atterpool* Water well acidulated.

I am alſo moſt creditably informʼd, That Dr. *Bently*, a late famous Phyſician in *Cheſhire*, who lived to almoſt a Hundred Years of Age, had ſuch wonderful Succeſs in Fevers, that he acquirʼd the Name

of

of the *Feaver-Doctor*, and that his Medicine was nothing else but the Decoction of a certain Herb well acidulated with the Spirit of —— ; a Noble Acid, which I am obliged not to reveal.

A Worthy Lady, whose Name I must not mention, has assured me, That she has brought in the use of Vinegar or Verjuice Posset-drink, amongst her poor Neighbours in the Countrey where she lives, in the Small-Pox; and where that has been used from the beginning, she has scarce observ'd any one to dye or be disfigur'd; which is agreeable to what I observe in my Essay, *p.* 24.

I have

I have likewiſe frequently obſerved, that three or four Spoonfuls of Vinegar, will immediately check the moſt violent Vomitings, occaſioned by the taking of ſome harſh Antimonial Medicines.

A great many other good qualities hath ſimple Vinegar internally taken, and externally applied (beſides its being a good Menſtruum) that I think not fit here to enumerate.

The next thing I ſhall do will be to compare *Arſnick*, as the higheſt and moſt exalted *Alkaly*, with *Oyl of Vitriol*, the moſt exalted *Acid*.

As for the external uſe of *Arſnick*, I know nothing of it

experimentally; but it being a thing of that pernicious conſequence internally taken, I ſuppoſe it can have no very friendly operation externally applied.

Internally taken, it cauſeth the moſt enormous Vomitings and Convulſions of the Stomach, Cold Sweats, Palpitations of the Heart, Swoonings, moſt violent Thirſt, and in general, ſeems to be a direct Enemy to Life, which in a ſhort time it fails not to deſtroy. All which effects it will not fail to have, given in never ſo ſmall a quantity. And all thoſe people who have been ſo vain as to pretend to correct the Poyſonous Venomous Quality of

Arſnick,

Arſnick, ſo as to convert it into a good and ſafe Medicine, have attempted it only by the means of *Acid* Salts, ſuch as Sea-Salt, Nitre, Tartar, Vitriol, *&c.* wherein I cannot tell whether any man hath yet been ſo happy as to ſucceed.

To prove *Arſnick* to be an *Alkaly*, and as ſuch is the Cauſe of all thoſe dreadful Symptoms that attend thoſe people who are ſo unhappy as to take it, I ſhall inſert a Relation made to me by Mr. *Payne* an Apothecary of *Brandford*, on *Saturday*, Feb. 16. which was as follows:

A certain Young Woman of *Brandford* having taken a very

large quantity of *Arſnick* (as he told me, an Ounce) ſhe was immediately attended with all the moſt violent Symptoms imaginable; upon which Dr. *Morris* was called in, who gave her large Quantities of Sallad Oyl, the uſual Remedy, without in the leaſt abating the Symptoms: Upon which he ordered them to procure a large quantity of Lemmons, and to preſs the Juice out of them, of which Juice he plentifully gave her, which ſoon took off and abated thoſe imminent and direful Symptoms which inevitably threaten'd Death; though the Operation of the *Acid* might be ſomewhat impeded, through the quantity of Oyl ſhe had taken before. But

But to return to my Buſineſs, which is to ſee what are the Effects of *Oyl of Vitriol.*

I confeſs the Acid Particles of *Oyl of Vitriol* are ſo concentrated, as to make it unfit to be externally applied, or internally taken, of it ſelf; but being diluted in any proper Vehicle, is a Medicine ſecond to none that I know of. A few Drops in Canary, given to the youngeſt Children who are troubled with Worms, ſeldom or never fails of having the deſired effect. It being mixed with Honey of Roſes, is one of the beſt Medicines that perhaps is known, for the Scurvy in the Gums, breeding Fleſh where it it is wanting, and faſtening the

Teeth. Being mixed with Spring-Water and Brandy, of each equal parts, to a moderate Acidity, is no deſpicable Medicine in giving eaſe in the moſt Tormenting Pains of the Gout, the Part being fomented with it Night and Morning. I may be almoſt poſitive, that the Medicine uſed by the Ingenious *Swiſs* Gentlemen who now reſide in this City, and are become ſo deſervedly famous, particularly for the Cure of Sir *Robert Howard*, is nothing elſe but a Mixture of *Oyl of Vitriol* with a certain Oleaginous Body, in due proportion. The ſame Medicine is alſo uſed and ſold by Mr. *Fiſher*, Chyrurgeon in *Alderſgate-ſtreet*: Which

Which Medicine rarely fails giving immediate Eaſe in the moſt Tormenting Pains of the Gout. Which is a Confirmation of the Truth of what I have ſaid in my Eſſay concerning the Gout, wherein I aſſert, that it is not from any Acidity in the Blood that the Gout is occaſioned, but from Particles of a quite contrary nature, (*viz.*) Alkalious ones; as plainly and evidently appears by Analyzing the Chalky Subſtance contained in the Nodes.

A better general Medicine than *Oyl of Vitriol* is ſcarce known in moſt continued Fevers, any ſmall Liquors, as Barley-Water, Small Beer, *&c.*

being well impregnated with it, and drank freely.

The following Mixture is a very noble Medicine in that painful Distemper the Stone in the Kidneys.

Take of Oyl of Bitter-Almonds one Ounce, Oyl of Vitriol Two Drams, Oyl of Sassafras a Scruple, mix them very well, then add Spirit of Wine rectified three Ounces, digest two or three days in a gentle heat. The Dose is a small Sweetmeat Spoonful in Old-Hock, or Infusion of Juniper-Berries, once in four hours during the Paroxism.

Given

Given for a Month or Six Weeks in an Infuſion of Lavender Flowers, is an admirable Medicine in Epilepſies.

I could mention a great many Caſes more in which this Medicine is of ſingular uſe; but in ſo doing I ſhould ſwell this Appendix to too great a bulk.

I ſhall next compare the Teſtacea, ſuch as Pearl, Coral, Crabs-Eyes, *&c.* with natural Balſoms and Gums, ſuch as Balm of *Gilead*, *Tolu*, *Peru*, &c. *Gum Ammoniacum*, *Galbanum*, &c.

As for Pearl, Coral, and Crabs Eyes, I know not that they are of any uſe at all, being ex-

externally applied; and being internally taken, no body that I know of pretends that they are uſeful any further than to abſorbe the Acidity of the Stomach, where people labour under any Indiſpoſition that is attended with an Acidity there. But they are ſo far from being uſeful in that caſe, that I have ſcarce known them uſeful to any one that has taken them upon that ſcore: And in any other caſe they have not the leaſt ſhew of being at all uſeful, but frequently do a great deal of miſchief, as I have obſerved in my Eſſay upon the Small-Pox, &c.

Here give me leave to mention a ſhort Caſe related to me by

by my worthy Friend Dr. *Bayard*, pertinent to this place.

A Merchant's Wife of ſome Eminence in the City of *Briſtol*, labouring under a decayed Stomach, was reduced to ſuch Weakneſs as not able to go, vomiting all ſhe took: Her Phyſicians ſuppoſing her Blood abounded with Acids, had from time to time loaded her weak Stomach with the whole Retinue of the Alkalious Kingdom, keeping their old Circle, from the Teſtacea to the Volatile Alkalies, and from thence to the Teſtacea again; and at laſt ſhe was perfectly cured with ſome few Doſes of the *Gas Sulphuris*, given in the *Bath*-Waters

Waters cold, twice or thrice a day.

As for Balſams, if I ſhould take upon me to deſcribe their Excellencies, it would be more fit for a large Volume than to take any room in the Appendix to a ſmall Eſſay. What a Noble Medicine is Balm of *Gilead* in many caſes? The Excellency of which is ſuch, that God by the mouth of an Inſpired Writer, by way of Alluſion, when his people were in a calamitous Condition, cries out, *Is there no Balm in Gilead? Are there no Phyſicians there* (to apply it)? *Why then is not the wound of the daughter of my people healed?* What a Noble Medicine is Ammoniacum in the moſt

moſt deplorable Aſtma's? the Spirit diſtilled from which, and an equal quantity of Verdigreaſe, in a naked Fire, I believe to be as Noble a Medicine as ever was uſed; nay, all the Gums and Balſams freed from their Ramous, Viſcous parts by Diſtillation, become much better Medicines than when they are in their Natural ſtate.

I ſhall ſay no more of Balſams, for fear I outrun my bounds; but ſhall proceed to anſwer ſome Objections raiſed againſt what I have ſaid in ſome parts of my Eſſay.

Object. 1. You ſay that the Scurvey is occaſioned by too great

great a quantity of *Alkalious* Particles in the Blood, and is only cured by *Acids*. How comes it to paſs that thoſe people that live upon nothing almoſt but highly-ſalted Meat, are more troubled with the Scurvey than other people, when you own Sea-Salt to be an *Acid*?

Anſwer. I own that Seamen and People who live by the Sea-ſide in Marſhy Grounds, who for the moſt part live upon Salt Meat and Fiſh, are more troubled with the Scurvey than other people: But this does not proceed from their eating a larger quantity of Salt than other people, but from their eating more Fleſh and Fiſh than

than other people do, which abound with *Alkalious* Particles, and from the moiſtneſs of the Air about them, which hinders their free Perſpiration. As for the Sea-Salt which is in great quantities mix'd with their Food, that is all or moſt part of it ſoon carried off by Urine, and with it ſome of the Alkalious ones alſo, and thereby framing an Armoniack Salt, which it is well known the Urine of ſuch Perſons abounds with: Now what we call *Sal Armoniac*, is only a mixture of Volatile *Alkaly* and Sea-Salt. But the Pores being ſhut by reaſon of the moiſture of the Ambient Air, the Volatile *Alkaly* which ſhould be diſcharged either

either by insensible Transpiration or Sweating, being pent in, causes all the Symptoms complained of by those Persons. To confirm the truth of which, it is well known, that Seamen at Sea, or those people who live in Marshy Grounds, will scarce be made to Sweat by the most violent Labour. Now all people who have been so curious as to taste Sweat, do very well know, that it hath an *Alkalious*, and not an *Acid* Taste; so that Sweating or free Transpiration being hindered, the Blood must necessarily abound with too great a quantity of *Alkalious* Particles; all those that should have been discharged by the Cutaneous Glands,

Glands, being kept in it. And ſo I hope this Objection is anſwered.

Object. 2. In your Eſſay, *Page* 80. you do allow that *Acids* in ſome Diſtempets do exorbitantly abound in the Stomach: Now how comes it to paſs, that there being ſo great a quantity of *Acid* in the Stomach, that the Blood and other Juices ſhould be deſtitute of Acidity; there being no other way to convey any thing into the Blood or Juices, but through the Stomach; and therefore whatever the Stomach abounds with, one would think muſt neceſſarily be impatted to the Blood and other Juices?

Answ. I have before observed, *Nov. Lum. Chyr.* pag. 3, 4. That there is no Innate Ferment in the Stomach, but that the Menstruum made use of to dissolve our Food, and to turn it into a Nutritious Juice, is the Liquor that by chewing of our Meat is squeezed out of the Glands of the Mouth, and parts adjacent, which by numerous Experiments does appear to be an *Acid*. Nay, all or most of the Noble Menstruums I know of, either in the Animal, Vegetable, or Mineral Kingdoms, are *Acids*. Now the Food being conveyed into the Stomach, and mixed with the Volatile *Acid* Liquor of the Glands of the Mouth,

is

is by the means of the ſaid Volatile *Acid* Liquor diſſolved, and turned into a Subſtance fit for the Nutrition of our Bodies; a ſtate of Health being ſuppoſed.

It is very well known, that few people are troubled with an Acidity in their Stomachs, but thoſe who uſe very little exerciſe, or whoſe Buſineſs diſpoſes them to a Sedentary Life, and by this means the Chyle when made, for want of Motion and Exerciſe, the Fibres of the Stomach alſo having loſt their Tone, and become laxe, is not ſoon enough carried out of the Stomach, and lying there too long, the greateſt part of it is turned into a

Substance like unto the Ferment which at first dissolved it: All people who know the nature of Ferments, will readily enough agree with me in this, That it is the nature of them to endeavour the Change of those things they are mixed with, into their own nature.

Object. 3. But some will say, We can agree with you in what you have said hitherto; but how will you do to clear your self of your own seeming Objection, which is, That this *Acid* Substance shall be kept from being conveyed into the Blood, and so being the only Cause of many Diseases?

Answ.

Anſw. I have always obſerved, That thoſe people who complain of an extraordinary Acidity in their Stomach,

Firſt, They make Water often, and in large quantities.

Secondly, They are very Lean. And

Thirdly, They are (for the moſt part) very Coſtive.

All which Symptoms I ſhall endeavour to prove are occaſioned for want of the *Acid* Subſtance contained in the Stomach, being conveyed into the Blood.

As for the firſt Head, Why people who complain of an Acidity in their Stomachs, make more Water than thoſe who are deſtitute of it; the

Reaſon I judge to be as follows:

The ſolid Food they eat, inſtead of being converted into a Viſcid, White Liquor, we call Chyle only, by means of too great a quantity of *Acid* is over-attenuated, and converted into a Thin Limpid Subſtance, and that in a ſhort time; which Thin Subſtance, by means of the Liver preſſing upon the Stomach, inſtead of paſſing into the Small Guts through the *Pylorus*, is ſqueezed into certain Veſſels which paſs from the bottom of the Stomach to the Kidneys, and ſo is carried off by Urine.

To prove that there are ſuch Veſſels which paſs immediately from

from the bottom of the Stomach to the Kidneys, I ſhall tranſcribe a Paſſage out of *Doleus's Encyclopedia Med.* pag. 359, 360. ſpeaking of the parts affected in the Dropſy.

I ſuppoſe (ſays he) that Liquid Subſtances may be conveyed from the Stomach through the *Omentum* or Cawl, to the Kidneys; hence it is thoſe Animals who have no Cawl, make no Water, as may be ſeen in Birds and Fiſhes. For the Confirmation of which Opinion, I have diſſected many Animals, always taking care before the Operation to gorge them with large quantities of clear Water, afterwards have diſſected them alive: I

have found the Stomach as yet diſtended with the Water, but preſſing the Veſſels of the Cawl which lead towards the Stomach, which being covered over with Fat like unto the Milky Veins, were to my no little ſatisfaction very Turgid: And foraſmuch as in a living Body the Pores of the Stomach and other Paſſages are always more open than in dead ones, where all things are flaggy, and fall together, therefore the ſaid Tranſmutation is not at all to be wonder'd at: And, which is worth taking notice of, in thoſe Hydropical People I have opened, I have always found the Cawl either Putrid, Torn, or full of Tumors.

mors. The following Experiment has also much confirmed me in my Opinion, *viz.* That there are Vessels to convey Liquid Substances from the Stomach, through the Vessels of the Cawl to the Kidneys: Not long since, an experienced *Herniotomist* or Cutter of Ruptures, of *Hanover*, whose Name was *Wedling*, by Section cured a certain Person of an Omental Rupture; and because a part of the Cawl was also cut away, the Patient, who is yet alive, does greatly complain of a difficulty in making Water; and if at any time he drinks any large quantity, he perceives a very great Weight and Pain about his Stomach, and

and is always looſe; hence, in my conjecture, ſome Veſſels which carry the Uſine right on to the Emulgents, were cut, by which means all the Drink he drank was carried into the *Duodenum*, and ſo hinders the Fermentation that is there performed, and makes all the Fibres laxe. From all which may be proved, that all we drink, and of conſequence all other Subſtances made very liquid in the Stomach, do not paſs through the Inteſtines to the Lacteal Veins, and from thence through the Thoracſtuck Duct to the Heart, becauſe the *Pylorus* is reflex to the Stomach, leſt the Liquid Subſtances contained in it ſhould ſlide out:

It

It is therefore certain that Liquid Subſtances lying at the bottom of the Stomach, do paſs through it in that part which is joined to the Cawl; and if theſe Veſſels, or the Cawl it ſelf are either lacerated, broken, putrified, or obſtructed with Oedematous Tumors, it neceſſarily follows that the Liquid Subſtances contained in the Stomach muſt be let fall into the Cavity of the *Abdomen*, and ſo a Dropſy is cauſed. But being free from any ſuch diſorder, Liquid Subſtances muſt freely paſs through them to the Kidneys, and ſo to the Bladder. I could cite other Authorities, beſides my own Obſervations, as Sir *George Ent*, *Charlton*, *Waldſ-*

Waldſmiedght, &c. but this one is, I think, ſufficient.

From this Doctrine may very great Conſolation be afforded to People labouring under the Stone in the Kidneys and Bladder; and Induſtrious Phyſicians need not deſpair of finding out ſuch Medicines as will Diſſolve or Break to pieces Stones contained in either of thoſe parts. One great reaſon I verily believe that has hindred Perſons from making diligeut ſearch after ſuch Medicines, has been from a ſuppoſition, that ſcarce any Medicine could retain its Virtue, but muſt be in great meaſure or altogether deſtroyed by the many Alterations it muſt undergo, according

to

to the ordinary Laws of Circumlocution; but were they fully ſatisfied (as there is no reaſon to the contrary) of this nearer Cut, I ſuppoſe people would not think the diſſolving Stones in the Kidneys and Bladder, ſo difficult a Task as it hath hitherto been thought to be.

To prove the Exiſtence of the foreſaid Paſſages for Fluid Subſtances from the Stomach, through the Veſſels of the Cawl to the Kidneys, and that Medicines may paſs unalter'd to the Kidneys and Bladder, I ſhall inſert a Couple of Caſes.

One Mr. *Bradford*, an Eminent Tradeſman of *Worceſter*, ſent to me one Afternoon, deſiring me to make all poſſible haſte,

haſte, for that he was upon the Wrack: When I came to him, I found him in a moſt dreadful condition, he not having made Water of two Days, and ſuch an intolerable Pain in his Back, that he was not able to ſupport himſelf under it. I preſently gave him ſome Medicines, ordering him to take them in large quantities once in half an hour: In an hour and half's time, at furtheſt, he ſent to me to acquaint me that he was well, and at eaſe, having piſs'd two large Chamber-Pots full, which held at leaſt Two Quarts apiece, and in the firſt Pot-full above Two Large Spoonfuls of ſmall pieces of broken Stones. He ſeveral

times

times ſince, occaſioned by hard Drinking, has been under the ſame Circumſtances, and upon taking the ſame Medicines has found immediate Relief. Now had theſe Medicines been conveyed from the Stomach to the Small Guts, and from thence by the Lacteal Veſſels, the common Receptacle of the Chyle in the Meſentery, and ſo on to the Blood, and from thence be ſeparated by degrees in the Kidneys, as it is brought there by the Emulgent Arteries, it had been altogether impoſſible that the Effect could have been ſo ſudden, and that the Medicines ſhould not have been greatly altered, or totally deſtroyed, by the many changes they

they must have undergone before they could come to the Part affected. But by the way I have been speaking of, the Medicines might all of them, and that without being in the least impaired in their Virtue, be transmitted to the Part affected, and so perform their Operations in breaking to pieces the Stone or Stones they met with, either in the Kidneys or Bladder.

Mrs. *Wheatly*, a Glasier's Wife without *Smithfield-Bars*, had a long time been afflicted with the Stone in the Bladder, and for about Nine Months had confined her self to her Chamber, the Misery she underwent being such, that made

her

her altogether uncapable of any buſineſs; and of ever being delivered ſhe was perfectly in deſpair, all common means having in vain been uſed; at laſt by ſome means or other ſhe was prevailed with to ſend for me: When I came to her, ſhe gave me a moſt lamentable Account of her Caſe; and although I gave her all the Encouragement imaginable, yet all that I could ſay, made but little impreſſion upon her, ſhe ſuppoſing her Condition to be ſo deplorable, that to expect deliverance was vanity in the higheſt degree: However, ſhe was at laſt prevailed upon to try what I could do for her: I began to give her ſome Medi-

cines, which she took in large quantities, and repeated them once in four hours: It was upon a *Monday* morning she began to take them, and on the *Wednesday* night next following I examined her Water, and found some small ragged Pieces of Stone in it; and tasting the Water, I could discern the Taste of the Medicines, which were *Salino-Sulphureous* ones, to be as vigorous altogether, as they were before she had taken them into her Mouth, and not, as I could discern, in the least altered in their taste. On the Morrow Morning, being *Thursday*, by Five a Clock she sent her Maid-Servant to me, to my House in St. *Martins-Lane*, to acquaint me

me that ſhe was delivered from her Miſery, and perfectly well. About Eight a Clock I went to viſit her, and found a Stone that ſhe had voided with little Pain, the Medicines having acted upon the Sphincter Muſcle of the Neck of the Bladder, and ſo relaxed it, as to make it give way for the Stone to paſs: The Length of the Stone was an Inch and half and half a quarter; it was Three Inches and a half round one way, and Two Inches and a half another. There were ſome ſmall flaws in it, which were made by thoſe little ragged pieces which came away the Night before, which I found in the Chamber-Pot.

The thing was so extraordinary, that it came to the Ears of her late Majesty, who desired to see the Stone, which I procured for Her, and she was pleased to say, *That it was the most Extraordinary Thing She had ever seen or heard of, to be brought away without Cutting or Instruments.* Any one who doubts the Truth of this Relation, may yet see the Stone at Mrs. *Wheatly's*, who carefully preserves it: The extraordinary Veracity and Integrity of the Person is such, that I am sure she would not tell an Untruth to do any man service.

I could give several other Instances of this nature; but these Two are, I think, sufficient,

cient, and a plain Demonſtration that there are Veſſels which carry Fluid Subſtances immediately from the Stomach to the Kidneys, without thoſe many Circumgyrations that people generally imagine: Nay, I don't queſtion but ſuddenly to make it appear by Ocular Demonſtration; which if I could not do, to people who are not mere Scepticks, Demonſtrations deduced from reiterated Experiments will be ſufficient.

I am ſure I have a great deal more to ſay for the Exiſtence of theſe Veſſels, than any of thoſe Learned Gentlemen who aſſert the Doctrine of Nutrition by the Nerves, have to ſay for that.

The Learned and Ingenious Dr. *Baynard's* Account he gives of the ſudden Effects of Vinegar before-mentioned, in a total Suppreſſion of Urine, is alſo a good Argument to evince the Truth of what I have been ſpeaking of. But to proceed to my Second Head, which is,

That thoſe people who abound with an Acidity in their Stomachs, are generally very Lean.

To prove which Poſition, will be no very difficult Task; for the ſolid Food they eat (and generally they have good Appetites) which is that which affords moſt Nutrition, being over-attenuated, is by that means

means made capable of paſſing through thoſe Veſſels I have before mentioned (which I ſhall preſume to call Urinary Veſſels) the more groſs parts only being conveyed to the Small Guts, which having but few Nutritious Particles in them, can afford but very little Nouriſhment to the parts; and the parts being deſtitute of their uſual and neceſſary Nouriſhment, Leanneſs of conſequence follows.

A ſufficient Argument to prove that Leanneſs proceeds from the want of a ſufficient quantity of *Acid* Subſtances in the Blood, is this: That Fat is nothing elſe but a Concrete, produced from the Mixture of

the *Acid* and *Oily* Parts of the Blood: Now the Blood hath never any *Acid* in it, but when people are in a perfect ſtate of Health: And when at any time the Blood is deſtitute of *Acid* Particles, and abounds too much with *Alkalious* ones, (which argues a Morbid ſtate) as it doth in all thoſe people who have too great a quantity of *Acid* in their Stomachs, which upon experiment any man may find to be true, although at firſt ſight, I confeſs, it looks very like a Paradox. Now the Blood being deſtitute of *Acid* Particles to coagulate the Oily ones, there can be no freſh production of Fat, and that already generated having its *Acid* Particles mortified

fied by the great quantity of *Alkalious* ones, preſently loſeth its conſiſtence, and is again converted into a thin Oyl, which is ſoon carried off by ſome of the Emunctories, there being nothing in the Blood fit for it to incorporate or mix with; and when theſe Oily Fat Particles are gone, then the Corroſive *Alkalious* Particles prey upon the Muſculous, Nervous Fibres, and ſo cauſe general Diſorders; at other times when they are in great quantities thrown upon particular parts, according to the nature of the part affected, they cauſe different Diſeaſes: But I don't know any one Diſeaſe cauſed by *Acids*, unleſs it be

be over-much Fatneſs, and what we call the Heart-burn, if they are to be accounted Diſeaſes; the moſt Healthy People being ſubject to the Heart-burn: Tho' the Heart-burn is as often cured by *Acids*, ſuch as *Ol. Vitriol. Dul.* &c. as by *Alkalies*: From whence I conjecture, that the Heart-burn alſo may be occaſioned from the Blood which is brought to the Coats of the Stomach, abounding with too great a quantity of *Alkalious* Corroſive Particles, which may vellicate and contract the part. Having in ſhort diſpatch'd this Head, I ſhall proceed to my Third;

That

That thoſe who abound with an Acidity in their Stomachs, are for the moſt part very Coſtive.

From the ſame reaſon that people abounding with an Acidity in their Stomachs, are Lean, it is that they are Coſtive alſo; the more Thin, Fluid Subſtances, being carried off by the Urinary Veſſels, and only the more Groſs ones conveyed into the Guts, and for want of a ſufficient quantity of Moiſture, the Excrements are over-harden'd, and the Guts not ſufficiently lubricated; and therefore Coſtiveneſs muſt neceſſarily follow.

But after all, I foreſee another Objection will be raiſed; and

and therefore to make every body eaſy, I ſhall lay down the Objection, and endeavour to anſwer it.

Objection: If the Acidity in the Stomach be the Cauſe of the ſolid Food we eat being over-attenuated, and ſo the Nutritious Particles being carried off by the Urinary Veſſels, as in *Atrophies*, &c. without being conveyed into the Blood, to afford Nutrition to the parts; How comes it to paſs that Iron or Steel, which you own to be an *Acid*, can be of any uſe? For inſtead of being uſeful, one would think that by increaſing the Acidity, it ſhould exaſperate and increaſe the Malady.

To which I *Answer*: I have before observed, that Iron or Steel cannot be conveyed into the Blood before it is turned into a Vitriol; and therefore to those people who have a great Acidity in their Stomachs, it is found absolutely necessary to give Iron or Steel without any precedent Preparation; which has been long since taken notice of by the Learned and Judicious Dr. *Cole*, in his Physico-Medical Essay concerning the late Frequency of Apoplexies. Now Iron or Steel being given crude and unprepar'd, is by the means of the *Acid* in the Stomach turned into a Vitriol, by which means the *Acid* is so embodied, as to make it uncapable

ble of passing through the almost imperceptible Urinary Passages; and likewise by embodying the *Acid*, hinders it from over-much attenuating the Chyle; so that being mixed with the Chyle, they are together conveyed into the Small Guts, and so on to the Blood, and by its Stiptick Acidity it confirms the Texture of the Blood, and mortifies the luxurious Alkalious Particles it meets with.

As for what I mention concerning the Efficacy of Juice of Lemmons in immediately abating and taking off the violent Symptoms that attended a Person who had been bitten with a Viper, after the Volatile Salt of

of Vipers, and other Antidotes, had in vain been given; I find the very ſame thing taken notice of by *Hoffman*, in his *Clavis Pharmaceutice Schroderi*, pag. 444, 445.

An Ingenious Perſon not long ſince, who had formerly embraced the Doctrine of *Acids*, was willing to try what Effects the Transfuſion of *Acid* and *Alkalious* Liquors into the Veins of Dogs would produce; accordingly he injected ſome *Oyl of Sulphur per Campan.* into the Veins of one Dog, which inſtead of diſordering him, made him brisk and lively, and very hungry: But another Dog into whoſe Veins ſome *Oyl of Tartar per Deliquium* (a known

known *Alkaly*) had been injected, it produced a clear contrary effect, the Dog being lumpish and dull, and in a few days died: But it is to be observed, that these two Liquors were so diluted as to make them fit to be taken in at the mouth before they were injected. Something (as I remember) of the same nature, is also taken notice of by *Fred. Hoffman*, *Fil. de Acido & Viscido.*

I have been well assur'd from a Person of the Greatest Honour, That the *Jews* in *Constantinople* (who are the only Physicians there) advise their Patients, in times when the Plague rageth, to eat Lemon and Sugar, and to drink Lemonade

nade in large quantities, and that by way of prevention; and thoſe people who do ſo, ſeldom or never have the Plague: And if at any time they are called to Perſons who have the Plague upon them, if they will but take the aforeſaid Medicines in large quantities, they very rarely miſcarry.

From many late Obſervations I am fully convinced, that the Gout is without any great difficulty to be cured, or at leaſt a Fit to be taken off, in a ſmall time, by a proper Courſe of *Acid* Medicines, both internally taken, and externally applied to the Part affected, and that without the leaſt Inconvenience afterwards: And I am

altogether certain, that the only reaſon why people have hitherto ſo fruſtraneouſly attempted the Cure of the ſaid Diſtemper, has been from the general Prejudice they have had againſt *Acid* Medicines, which are the only things capable of doing ſervice.

Tho I do ſo mightily contend for the Uſe of *Acids* in general in the Cure of Diſeaſes; yet I do not in the leaſt pretend that any one *Acid* is capable of anſwering a Phyſician's Intention in the Cure of all Diſeaſes: Neither Vinegar nor Lemmons are to be reckoned *Panacea's*; tho, for ought I know, in the hands of a Perſon who well underſtands their uſe, they will either

either of them do more than many of the celebrated *Panacea's*.

No man is fit to be called a Phyſician, who does not well underſtand the Nature of Diſeaſes, and of the Juices contained in a Human Body, which is what hath hitherto been but little enquired into; men taking up with general Notions that had no Foundation; which has been the only reaſon that Phyſick hath been ſo long practiſed without the leaſt certainty; Phyſicians changing the Method of their Practice almoſt as often as we do that of our Cloaths. Being extremely well skill'd in the Anatomy of the Solid Parts, is

a Noble Qualification, and enables a man to talk finely, but does not in the leaſt tend to enable men to cure Diſeaſes. It is an exact Skill in the Anatomy of the Juices, the Fluid Parts, that will make a Man a good Phyſician: But in this ſort of Study few have been converſant. An exact Knowledge of the *Materia Medica* in general, and the Specifick Differences there are between thoſe Medicines, ſeemingly of the ſame Tribe, is alſo an abſolutely neceſſary Qualification: For that *Acid* that will cure a Fever, will not cure the Gout; and that which will cure the Gout, will not, perhaps, cure another Chronical

Di-

Diſtemper; there being a vaſtly wide difference between thoſe very Medicines which are ſeemingly the ſame.

I do poſitively affirm, That neither Blood nor its Serum being any way expoſed to Putrefaction, will by that means in the leaſt become *Acid*, but rather more *Alkalious*: Now *Acids* in general hindring Putrefaction, and likewiſe reducing things from a ſtate of Putrefaction that are already become Putrid, muſt be the great Medicines to cure Diſeaſes; for there is no Diſeaſe but what proceeds from ſome ſort of Putrefaction of the Fluid Parts of our Bodies.

What I have ſaid in my Eſſay, and alſo in this Appendix, has been only in general terms; but I am now reducing all to a Method, I deſigning my Hiſtory of Blood to be alſo a Methodical Hiſtory of Diſeaſes, with an Account of the Medicines proper to be uſed in the Cure of them: I being reſolved to ſerve my Generation to the utmoſt of my Power, let my Treatment be what it will.

I ſhall conclude this Appendix with Two or Three Caſes, and the Method I uſed in the Cure of them, as a Confirmation of the Truth of what I have ſaid concerning ſome things in my Eſſay.

Caſe

Case the First.

A Gentleman who had long laboured under a Sciatica, *viz.* Two or Three Years, and had applied himself to several Persons of the greatest Eminence for Advice, and had by their Prescriptions been loaded for that whole time with *Alkalious* Medicines, without receiving the least advantage, the Leg and Thigh of the Left Side being greatly Emaciated, and a very large Glandulous Tumor on his Hip: He was never free from violent Pain, and very Lame. I first of all Purged him well for about a Fortnight with *Calamel. Tart. Vitriolat.* and

Rezin of Jallap: I afterwards gave him the following Medicines, which he took constantly Three Times a Day for about Ten Weeks; in which time, without any External Application at all, his Pain left him, the Tumor disappeared, and his Leg and Thigh, which were before wasted to mere Skin and Bones, became equally Plump and Fleshy with the other.

Recipe *Cinnaberis Antimonii, vel (quod melior est) Factitii Com. Officinarum Recenter Levigat. Unciam Unam. Gum. Guaiaci Dracmas Sex. Conf. Cynosbati Uncias Tres. Syr. Sambuci q. s. F. Electuarium.*

Eluarium. Doſis eſt quant. Nuciſm. ſcatæ Ter in Die, Horis Medicinalibus, ſuper bibendo Uncias Octo Infuſi ſequentis.

Recipe *Rad. Bardanæ Siccat. & groſsè Contuſ. Uncias Octo. Baccar. Juniperi, Uncias Quatuor, ſem. Bardanæ, Faxini ana Unciam Unam ſemis. Saſſafras Unciam Unam. Tartari Vitriolati Dracmas Tres. Aq. Font. Libras Sex. Infundè Clausè & Calidè per horas* xii. *& Coletur, Colaturæ ſing. Libris duabus. Adde Sp. Liq. Guaiaci Rect. Unciam Semis M.*

This

This Method I have ſo often experienced in this Caſe, that I dare recommend it as to be depended upon.

Caſe the Second.

A pretty young *Gentleman*, who had been too free with the Fair Sex, by his over-frequent Embraces was Poxt to the higheſt degree, being Leprous from the Crown of his Head to the Soles of his Feet, and all other Symptoms of the moſt confirmed Pox I ever met with. He was altogether averſe to *Salivation*, I therefore gave him the aforeſaid Medicines, which he took three times a day for about two months; but

but I first of all purg'd him very well with *Calamel. Tart. Vit.* and *Rezin. Jallap.* and for the last Fortnight sent him to the *Bagnio* three times a week, ordering him to take a large Dose of the Electuary and Infusion about an hour before he went into the *Bagnio*. At the two months end he was perfectly freed from his Leprosy, and his Skin as clean and white as ever I saw any one in my life; and all other Symptoms that attended him, were perfectly vanished.

Case the Third.

A Corporal in the Right Honourable the Earl of *Oxford*'s Regiment, was Poxed to the

the higheſt degree, upon which he applied himſelf to a Phyſician near *Chelſey*, who put him into the powdering Tub of Affliction three times; and altho he had each time undergone a Regular *Salivation*, his Symptoms were not in the leaſt abated. He was emaciated to ſuch a degree, that he was like a meer *Skeleton*. He had violent Pain in his Head, Shoulders, Arms, Thighs, and Shin bones; and when he was warm in his Bed, the Pain was ſo exaſperated, that altho he was ſo weak as to be ſcarce able to ſtand, yet out of his Bed he was forced to get, and crawl about in the cold, which afforded him ſome ſmall Relief; his Appetite was

quite

quite loſt, and a continual Hectick upon him. To be ſhort, I think I never ſaw ſo miſerable a Spectacle in my whole life. To this Man I gave the Electuary and Infuſion three times a day, which ſoon abated the violence of the Symptoms, and continuing the uſe of them about three months, altho he had ſeldom leſs than four or five Stools a day, yet he gather'd Fleſh, and in that time became a hale, hearty Man, to the great ſurprize of all who knew him. I may be poſitive that it was not above ſix weeks before he was able to walk about his buſineſs.

I have given theſe very Medicines to I believe Two hundred

dred People in ſeveral Chronical Diſtempers, with extraordinary ſucceſs; and altho in the day-time they ſeldom fail of working three or four times by Stool, and in the night provoking Sweat; yet I have ſcarce known any one perſon who has taken them, that during the very time they are taking them, for all the very great Evacuations they cauſe, that have not ſenſibly gather'd fleſh, and if weak, recover'd ſtrength. Whereas let the ſtrongeſt perſon take any of the common Purgers but a month together, and altho they have not above two or three Stools a day, yet they will emaciate them, and weaken them to a great degree, which

is

is a very great Argument of the excellency of *Cinnaberine* Medicines mixt with *Gum Guaiaci* above the common Purgers: The one carrying off the Nutritious Juices, as well as the Excrementitious ones; the other only causing a due Secretion of the Noxious, Excrementitious Juices, which by so doing, Nature is thereby rid of any Load wherewith she is oppressed, and enabled to apply the Nutritious Juices to the ends they are designed for.

I have in some extraordinary Cases, given above a pound of *Cinnaber* at times to one person, and never knew the least ill Symptom follow, nor ever once to excite *Salivation*. And I do

do verily believe, that in the hands of a perſon who knows how to uſe it, it is one of the greateſt Medicines in Chronical Diſeaſes in the World; but being uſed with *Gum Guaiaci*, and *Spiritus Guaiaci Rect.* it does much better than alone, they greatly aſſiſting it in its operation. Being mixed with proper Cephalicks, and taken for ſome time, it is a wonderful Medicine in Epilepſies, and ſome other Nervous Diſtempers. *Hoffman* has wrote a whole Treatiſe of *Cinnaber*; and I am capable of ſpeaking ten times more in its praiſe from my own Experience, than *Hoffman* hath done.

Con-

Convulſions are Diſtempers that Children are frequently troubled with, more of them dying of Convulſions than of all other Diſtempers, Teſtaceous Powders are the Medicines generally given, as the great *Aſylum* to which Phyſicians fly, but very rarely with Succeſs. But upon the giving them temperate *Acids*, I have generally found them to anſwer my Intentions.

I was, not long ſince, ſent for to a Child who had Convulſions to ſuch a degree, that his Parents believed it to be an Epilepſy. His Belly was hard like a ſtone, and continual Tortions and Convulſive Contractions, ſometimes of his

Hands and Arms, ſometimes his Legs and Thighs would be diſtorted and almoſt put out of Joint; ſometimes had the moſt violent Vomitings, at other times the Muſcles of his Face would be ſtrangely contracted. I gave it the following Medicines, and in about two days he was perfectly free from his Convulſions.

Recipe *Tart. Vitriolati Dracmam Unam. Crem. Tart. Dracmas Duas. Caſtorei Dracm. Semis. Sacchari Albi Unciam Sem. M. F. Pul. in* viii *Chartis diſtribuend. ex quibus cap. nº* 1. *quartâ quâque horâ in Cochlear. Julap. ſeq. ſuper bibendo*

bendo Cochlear. Tres vel quatuor ejusd.

Recipe *Aq. Rorismarini, Pulegii ana Uncias Tres. Peon. Comp. Uncias Duas. Ol-Vitrioli Dul. Scrupul. Unam. Syr. Peoniæ Dracmas Tres M. F. Julap.*

Recipe *Ol. Amigdala. Amar. Unciam Unam. Ung. Dialtheæ Uncias Duas. Ol. Anisi, Pulegii ana gut. vi. m. F. Linimentum, cum quo Illinatur Regionem Umbeliculem Manè & Vesperi, Superponendo Pannum Laneum ter duplicatum.*

By this Method, with ſome variation according as different Symptoms appear, I have known multitudes of Children, whoſe Lives have been deſpaired of, cured of the moſt violent Convulſions in a ſmall time.

I have likewiſe obſerved, that in malignant Fevers, thoſe people who are treated according to the uſual cuſtom, with *Alkalies* and *Alexipharmicks*, are generally attended with violent Convulſions: But thoſe who uſe *Acids* plentifully, are ſeldom or never Convulſive.

I have cured abundance of people of that troubleſome Cough that hath raged this *March*, by only giving them large

large quantities of Lemmon and Sugar, to be eaten both day and night, and giving an Opiat with ſome Drops of *Oyl of Sulphur per Campan.* at night going to Bed.

In violent Hyſterical Fits in Women, I have frequently, without (ſeldom) failing of Succeſs, given a Mixture of Two or Three Spoonfuls of Vinegar, a few Grains of *Caſtor*, and about a Quarter of a Pint of Spring Water: Which Mixture has frequently abated and taken off the Fits, when before they had been greatly exaſperated by Spirit of *Hartshorn*, *Sal Armoniac*, &c. *Gas Sulphuris* alſo given alone is a wonderful Medicine in violent

Hyſterical Fits. And in the beginning of Conſumptions, I believe there is not a better Medicine than *Gas Sulphuris* given in large quantities. But the *Cortex*, which is now ſo univerſally uſed in Conſumptions, without the leaſt ſhew of Reaſon, I believe to be the moſt pernicious Medicine in Hectical Diſtempers that ever was given. I have enquired lately of ſeveral Perſons, both Phyſicians and Apothecaries, whether they ever yet ſaw a Hectick cured by the *Cortex*, who have unanimouſly declared they never did, and that ſcarce any one that hath taken it, but have died. I muſt declare that I never yet ſaw any one

cured

cured of a Conſumption, but by *Acids*, ſuch as *Gas Sulphuris*, *Ol. Sulphuris per Campan.* &c. by the means of which I my ſelf have cured many. But ſometimes, in ſome very extraordinary Caſes, eſpecially if the Diſtemper have been of long ſtanding, and the Texture of the Lungs much ſpoiled, even *Acids* themſelves will leave us in the Lurch, even after Symptoms have ſeemed to be much abated, and things have look'd with a promiſing Aſpect. Which I my ſelf have in one or two Patients whoſe Lives have been very dear unto me, experienced; which I cannot mention without the greateſt Concern. For all which, I

dare not, even in Conſumptions, leave off the uſe of *Acids*, becauſe I am ſure they will do more than any other beſides; and there are no Medicines whatſoever that will make people Immortal. I have my ſelf cured many with *Acids*, but never could yet ſee or hear of one that was ever cured without them.

The Learned Dr. *Jones*, whoſe Civility to me (tho an utter Stranger, whom I never ſaw) I cannot ſufficiently expreſs; in a very kind and obliging Letter has ſent me a Catalogue of Diſtempers he has in the Courſe of his Practice cured by Acids.

(1.) Hard Bellies in Children with

with an Atrophy attending it, which is very common, and ſeldom cur'd by other Methods.

(2.) The Stone, that is, to take it off (if of a paſſable Bigneſs) with Eaſe, Speed, and Safety.

(3.) Child-bed Fevers, of which Dr. *Willis* ſays, they are moſt difficult to be cur'd of any.

(4.) Catarrh or Defluxion.

(5.) *Cholera Morbus.*

(6.) Diarrhea and Dyſentery.

(7.) Jaundice.

(8.) The Small-Pox, *&c.*

This Worthy Perſon, whoſe Name is deſervedly famous throughout *Europe*, for his Noble Piece *De Febribus Intermittentibus*, thus concludes; *I would have ſent you more, but theſe coming readily to my mind, have been certainly*

tainly cured by me, by the means of Acids.

The wonderful Succeſs Dr. *Baynard* (whoſe intimate Converſation I have of late been honoured with) has had through the Courſe of his Practice, is eminently known both in *London*, *Bath*, and *Lancaſhire*, where he formerly dwelt: And his Practice has chiefly run upon *Acids*; which (as he hath all the reaſon in the world) he does ſtrenuouſly vindicate and defend; and by whom, I muſt own, ſince my Acquaintance with him, I have had clearer Notions of the different ſorts and various uſe of *Acids* than ever I knew before; he being one of the moſt Candid, Ingenious,

nious, Communicable Persons, I ever met with.

It was out of a Life saving Principle, that these Gentlemen embraced this Doctrine of *Acids*, in opposition to the Multitude; who for want of this knowledge, daily record their sad Cures in *Sextons* Books and the Weekly Bills: And I dare say, they have wrought more Substantial, Good Cures, than any Twenty besides them, who have acted upon different Principles.

I don't find that the Method of making the *Gas Sulphuris*, which I have often mentioned, is any where set down; I shall therefore give an Account of its Preparation, which tho a very

very eaſy one, is for all that a very Noble Medicine.

Gas Sulphuris.

Put into a large Glaſs Receiver, that will hold Six or Eight Gallons, about Four Quarts of pure Spring Water; when you have ſo done, burn in the Receiver a Quarter of a Pound of pure *Sulphur Vivum* made into Matches: You muſt take care that your Matches be very long, ſo that when they are lighted, the Flame may be as near the middle of the Body of the Receiver as may be: By that time you have burnt Three or Four Matches, the Receiver will be ſo full of the Steams of Brimſtone, that when the lighted Match is put into it, it will be im-

immediately extinguiſh'd; you muſt then ſtop the Mouth of the Receiver very exactly with a Wet Cloth, and let the Steams condenſe; when you ſee the Receiver clear, then burn more Matches till the Receiver is again fill'd with Steams, then ſtop up again, and repeat this work till your Matches are all burnt, and your Water will then be impregnated with the Volatile Acid Steams of Brimſtone.

This Medicine given liberally in Malignant Fevers has done Wonders, even where people have been given over as dead. It is an excellent Medicine being taken by way of Prevention in Infectious Seaſons. And I think, if any Medicine deſerves

that

that Name, this doth deserve to be called the true *Prophylacticon.*

Dr. *Baynard* has another way of making the *Gas Sulphuris* somewhat more warm and Alexipharmick.

Take a large Glass Receiver with a mouth of three or four Inches Diameter, place it Horizontally, into which pour *Aq. Petasitid. Ulmariæ simp. Vini Rhenani, ana Libras duas Aq. Rutæ, succi Pomorum silvest. vet. ana Libram unam Aq. Theriacalis, Prophylact. Sylvij ana Uncias quatuor M.* Then take an Iron Ladle fitted to the mouth of the Glass, with a long Handle, put into the Ladle half an Ounce of *Sulphur Vivum* powdered,

dered, accend with a ſmall Gad of red hot Steel, when lighted, clap it into the Receiver ſo far, that the Fumes may ariſe in the middle of the Glaſs, and the bigger the Glaſs the better; for the more Fumes it contains, the ſooner will your Operation be over. Stop the mouth with a wet Cloth, that the Steams get not out; when the Fumes have extinguiſhed the Flame, let it ſtand, that the *Oleum Sulphuris* may trickle down the ſides of the Glaſs, and ſubſide upon the *Menſtruum*; when the Fumes are ſetled, and the Glaſs clear, quickly draw out your Ladle, and repeat the Action, until it be well impregnated with ſtrong

Volatile *Gas*. Remember always to keep the mouth of the Glaſs well ſtopped with the wet Cloth, otherwiſe the *Gas*, which is of a moſt ſubtile nature, will evaporate.

A Spoonful of this given once in two or three hours, in any proper Julap, doth moſt wonderfully extinguiſh Thirſt in Fevers, procure Sweat or Urine infallibly, takes off the drineſs of the Tongue, temperates and cools the over-heated Bile, and procures Reſt. Alſo mixed with a little Claret-Wine, and a Drop or two of Oil of Cinnamon, does, to a Miracle, ſtop Vomiting, and the beſt Peptick for a weak and decayed Stomach.

Note,

Note, That when the *Gas* is quite gone and flown off, the mixture will notwithſtanding remain ſowre, as impregnated with the *Oleum Sulphuris;* but the *Gas*, which is the better part, will in time be loſt, (it is ſo ſubtile) even almoſt through the pores of the Glaſs. You muſt dip the Cork-end of the Bottle in melted Brimſtone, and keep it always immerged in cold water. But the beſt way to keep it is in ſmall Glaſſes, and open no more at a time than you uſe, it loſing its volatile parts very much every time the Bottle in which it is kept is opened.

As a further Illuſtration of the Doctrine of *Acids*, I ſhall

add an account I received from Dr. *Oliver*, one of the Phyſicians of the Fleet, about the uſe of *Beveridge*.

Beveridge is a prickt, ſowr *Spaniſh* Wine, one Hogſhead of this mixed with 3 Hogſheads of water, makes the Drink the Sailors are allowed to drink *ad libitum*.

By my Experience in the Fleet, thoſe Ships Crews who drank this *Acid* Liquor for their common Drink, were much healthier than thoſe who by their obſtinacy would not be brought to it; as for Example:

The *Royal Oak* a third Rate, carrying about 500 men, whoſe Ship's Crew, by Admiral *Nevil's* particular Order, began firſt to drink

drink *Beveridge*, (he having had experience of it two years in the *Mediterranean* in the *Crown*, in all which time he loſt not above two men), and in three months time I don't remember I had three Complaints, tho at the ſame time, in other Ships where they drank no *Beveridge*, Fevers and Fluxes were very frequent. Here I ſhall inſert one thing worthy of Note, That the *Royal Oak* wanting *Beveridge*, and being obliged to drink water only, in a few days time they grew very ſickly, and loſt above 30 men in a month, inſomuch that the men themſelves were ſo ſenſible of the advantage they had by drinking *Beveridge*, that they heartily deſired

that

that they might drink nothing else but *Beveridge*, and begg'd it wherever they could find it. The like experience I had of the *Eagle*, *Norfolk*, and several other of our Ships, who were always better in health when they drank *Beveridge*, than when they drank Water alone, or sound Wine and Water. From these Experiences, I advised the Captains of each respective Ship, to procure *Beveridge* for the common Drink of the men, and the Success answered my Expectation.

This is an exact Relation as I took it from Dr. *Oliver*'s own mouth.

I have more to say, but have already out-run the Bounds of an Appendix, and therefore shall omit what remains, for another opportunity.

FINIS.